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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,437	12/19/2001	Yasuhiko Matsuoka	KOJIM 200-D-1	3284
23599	7590	06/14/2005	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			LUK, EMMANUEL S	
			ART UNIT	PAPER NUMBER
			1722	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/021,437

Applicant(s)

MATSUOKA ET AL.

Examiner

Emmanuel S. Luk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 6,8-12 and 14-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6,8-12 and 14-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/30/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. Claims 6, 14, and 15 have invoked means plus function pursuant to 35 U.S.C. 112, sixth paragraph. Where means plus function language is used to define the characteristics of a machine or manufacture invention, claim limitations must be interpreted to read on only the structures or materials disclosed in the specification and "equivalents thereof." (Two en banc decisions of the Federal Circuit have made clear that the Office is to interpret means plus function language according to 35 U.S.C. 112, sixth paragraph. In the first, *In re Donaldson*, 16 F.3d 1189, 1193, 29 USPQ2d 1845, 1848 (Fed. Cir. 1994), the court held:

The plain and unambiguous meaning of paragraph six is that one construing means-plus-function language in a claim must look to the specification and interpret that language in light of the corresponding structure, material, or acts described therein, and equivalents thereof, to the extent that the specification provides such disclosure.

The means for casting or filling, and means for irradiating light will be interpreted according to the corresponding structure in the specification.

### ***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

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patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 6, 8-12, 14, 16-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 2, and 6 of U.S. Patent No. 5952397 in view of Boneberger (5894002), Hayashi et al (4995799) and Tensor (5885514).

Fujiki teaches a composition for templating mother molds comprising of the composition (see Col. 2, line 24 to Col. 3, line 62). The compositions taught by Fujiki are similar to claimed composition with overlapping ranges in the formulas.

Claims are rejected under 35 U.S.C. 103(a) as being unpatentable over Boneberger et al (5894002) in view of Fujiki et al (5952397).

Fujiki fails to teach the means for casting or filling and means for irradiating.

Boneberger teaches the claimed apparatus having a mold (1,2) having a cavity (12) corresponding to the outer contour of an article to be duplicated, the mold being transparent (Col. 6, lines 19-24), means for casting or filling (6) the mold cavity, means for irradiating light (7) from outside the mold.

It would have been obvious to one of ordinary skill in the art to modify Fujiki with the means for casting or filling and means for irradiating as taught by Boneberger because it allows for means in creating mother molds.

Fujiki and Boneberger are analogous prior art references as both pertain to transparent molds adapted to mold a photo-curable liquid resin therein.

In regards to claims 10, 11, 22 and 23, these are features are properties of the silicone rubber composition and thus do not further limit the parent claim if the properties are already inherent features of the material.

In regards to claims 12 and 24, the material to be filled in the mold cavity is an intended use of the apparatus and has little patentable weight since there is no further structural limitation to the parent claim.

In regards to claims 8 and 20, Fujiki fails to teach means for defoaming and agitating. Hayashi teaches an optical manufacturing apparatus having a gas pressure control mean and defoaming means to defoam the photopolymer (Col. 15, lines 50-57). Thus, the polymer is defoamed under reduced pressure, thereby it would have been obvious to one of ordinary skill in the art to modify Fujiki, in view of Boneberger with gas pressure control mean and defoaming means as taught by Hayashi because it allows for defoaming of the polymer prior to curing.

In regards to claims 17 -19, Fujiki fails to teach the mother mold separable to two or more sections and the means for irradiating is one or more UV fluorescent lamps.

Tensor teaches a transparent mold comprising of two sections (30,40) that is used for forming and the use of infrared lamps (42), the mold having runners (52) for filling the cavity via injection molding (Col. 49-55). It would have been obvious to one of ordinary skill in the art to modify Fujiki, in view of Boneberger with mold sections, runner and UV lamps as taught by Tensor because it allow for an improved process for molding parts.

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4. Claims 15 and 25-29 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4 and 7 of U.S. Patent No. 5952397 in view of Boneberger et al (5894002) and Hayashi et al (4995799).

Fujiki (5952397) teaches a composition for templating mother molds comprising of the composition (see Col. 2, line 24 to Col. 3, line 62) with a platinum catalyst (Col. 3, line 59). The compositions taught by Fujiki are similar to claimed composition with overlapping ranges in the formulas.

Fujiki fails to teach the means for casting or filling, means for irradiating,

Boneberger teaches the claimed apparatus having a mold (1,2) having a cavity (12) corresponding to the outer contour of an article to be duplicated, the mold being transparent (Col. 6, lines 19-24), means for casting or filling (6) the mold cavity, means for irradiating light (7) from outside the mold.

It would have been obvious to one of ordinary skill in the art to modify Fujiki with the means for casting or filling and means for irradiating as taught by Boneberger because it allows for means in creating mother molds.

Fujiki and Boneberger are analogous prior art references as both pertain to transparent molds adapted to mold a photo-curable liquid resin therein.

In regards to claims 27 and 28, these are features are properties of the silicone rubber composition and thus do not further limit the parent claim if the properties are already inherent features of the material.

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In regards to claim 29, the material to be filled in the mold cavity is an intended use of the apparatus and has little patentable weight since there is no further structural limitation to the parent claim.

In regards to claim 25, Fujiki fails to teach agitating and defoaming means under reduced pressure.

Hayashi teaches an optical manufacturing apparatus having a gas pressure control mean and defoaming means to defoam the photopolymer (Col. 15, lines 50-57). Thus, the polymer is defoamed under reduced pressure, thereby it would have been obvious to one of ordinary skill in the art to modify Fujiki in view of Boneberger with gas pressure control mean and defoaming means as taught by Hayashi because it allows for defoaming of the polymer prior to curing.

### ***Response to Arguments***

5. Applicant's arguments with respect to claims 6, 8-12 and 14-29 have been considered but are moot in view of the new ground(s) of rejection. However, new obviousness double patenting rejections have been in light of the Fujiki et al (5952397) reference in regards to the mold composition. The material composition for a transparent mother mold taught by Fujiki is similar to the mother mold composition of the claimed invention.

**Conclusion**

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel S. Luk whose telephone number is (571) 272-1134. The examiner can normally be reached on Monday-Thursday 8 to 5 and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Davis can be reached on (571) 272-1129. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EL



ROBERT DAVIS  
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GROUP 1200 / 1700

6/13/05